

Comparisons of Job Characteristics

Focus Occupation: [Electricians \(47-2111\)](#)

Associated Occupation: [Electrical and Electronics Installers and Repairers, Transportation Equipment \(49-2093\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 75

Focus Occupation: Electricians (47-2111)

Associated Occupation: Electrical and Electronics Installers and Repairers, Transportation Equipment (49-2093)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Mechanical	6.8	12.6	16.5	>> Current knowledge level is likely more than sufficient
Computers and Electronics	8.4	11.7	10.1	< Expanded education and/or training may be required
Production and Processing	6.0	11.5	5.8	<< Extensive education and/or training may be required
Engineering and Technology	5.7	11.0	11.8	0 Current knowledge level may be sufficient
Design	5.2	8.8	13.4	>> Current knowledge level is likely more than sufficient
Building and Construction	4.0	8.6	14.6	>> Current knowledge level is likely more than sufficient
Physics	4.3	8.3	10.9	>> Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 72

Focus Occupation: Electricians (47-2111)

Associated Occupation: Electrical and Electronics Installers and Repairers, Transportation Equipment (49-2093)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Repairing	3.4	9.2	11.6	> Skill level is likely sufficient
Troubleshooting	4.5	8.8	12.3	>> Skill level is likely more than sufficient
Equipment Maintenance	3.5	8.6	10.3	> Skill level is likely sufficient
Equipment Selection	3.3	6.1	8.4	>> Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 89			
Focus Occupation: Electricians (47-2111) Associated Occupation: Electrical and Electronics Installers and Repairers, Transportation Equipment (49-2093)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Arm-Hand Steadiness	6.8	11.4	11.0	0	Current ability level may be sufficient
Manual Dexterity	6.5	10.3	11.6	>	Current ability level is likely sufficient
Finger Dexterity	7.6	10.2	11.8	>	Current ability level is likely sufficient
Control Precision	6.6	9.0	9.5	0	Current ability level may be sufficient
Visual Color Discrimination	6.4	8.7	12.8	>>	Current ability level is likely more than sufficient
Multilimb Coordination	6.0	8.5	11.4	>>	Current ability level is likely more than sufficient
Extent Flexibility	4.8	8.3	10.4	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 96
Focus Occupation: Electricians (47-2111)		
Associated Occupation: Electrical and Electronics Installers and Repairers, Transportation Equipment (49-2093)		
Work Activities	Exclusivity of Activity	
Analyze operation of malfunctioning electrical or electronic equipment	68	
Bend tubing or conduit	81	
Distinguish colors	44	
Estimate cost for repair services	82	
Fabricate, assemble, or disassemble manufactured products by hand	11	
Install electrical conduit or tubing	81	
Install electrical fixtures or components	71	
Install electronic power, communication, control, or security equipment or systems	76	
Install lead-in wires to control boxes and other components	89	
Install or replace meters, regulators, or related measuring or control devices	66	
Install/connect electrical equipment to power circuit	57	
Install/string electrical or electronic cable or wiring	76	
Perform safety inspections in industrial, manufacturing or repair setting	32	
Read blueprints	10	
Read tape measure	41	
Read technical drawings	7	

Repair electronic components, equipment, or systems	74
Repair or adjust measuring or control devices	71
Repair or replace electrical wiring, circuits, fixtures, or equipment	49
Replace electronic components	63
Solder electrical or electronic connections or components	55
Test electrical/electronic wiring, equipment, systems or fixtures	54
Test electronic or electrical circuit connections	66
Understand service or repair manuals	40
Use electrical or electronic test devices or equipment	40
Use hand or power tools	2
Use interpersonal communication techniques	10
Use oscilloscopes in electronics repair	77
Use soldering equipment	44
Use voltmeter, ammeter, or ohmmeter	52

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: n/a

Focus Occupation: Electricians (47-2111)

Associated Occupation: Electrical and Electronics Installers and Repairers, Transportation Equipment (49-2093)

Tools and Technologies

Exclusivity

Tools and technology data is unavailable for one or both occupations.

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.